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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,876	12/28/2000	Malcolm M. Smith	062891.0423	9414

7590 02/24/2005

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EXAMINER

HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/752,876	Applicant(s) ^{AK} SMITH, MALCOLM M.	
	Examiner Clemence Han	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on September 3, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-12, 14-20, 22, 23 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14-20, 22, 23 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Responsive to interview on February 16, 2005, applicant's argument on the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 1–3, 5–12, 14–20, 22, 23 and 25–31 rejected under 35 U.S.C. 103(a) as being unpatentable over Verma et al (US Patent 6,522,880) in view of Das et al. (US Pub. 2001/0036834) and further in view of Kim (US Patent 6,070,075).

Regarding to claim 1, Verma teaches a system for distributing packets for communication to a mobile unit comprising: a mobile unit 20 having a device identifier (Column 2 Line 64) and an internet protocol (IP) address comprising a first subnet identifier, the mobile unit roaming in a foreign network having a second subnet identifier (Column 2 Line 6–12). Verma, also, teaches about a mobility manager 80, a foreign agent 30 and a home agent 50. Verma, however, does not teach about multicasting. Das teaches about multicasting. Das teaches a mobility manager 130 operable to determine a multicast address for the mobile unit

based on the device identifier [0023], to receive multicast address requests that include the device identifier [0023], and to communicate the multicast address responsive to the multicast address requests [0023]; a foreign agent 140 in the foreign network, the foreign agent operable to detect the mobile unit [0023], to determine the device identifier for the mobile unit [0023], to communicate a request including the device identifier to the mobility manager [0026], to receive the multicast address from the mobility manager [0023], and to register for a multicast group identified by the multicast address [0027]; and a home agent 120 operable to receive IP packets addressed to the mobile unit, to determine the multicast address associated with the mobile unit [0027], to encapsulate the IP packets as payloads for multicast packets addressed to the multicast address 252, and to communicate the multicast packets for receipt by devices registered for the multicast group using a packet network 254. It would have been obvious to one skilled in the art to modify Verma to use multicasting as taught by Das in order to reduce handoff latency [0010]. Verma in view of Das, however, does not teach the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold. Kim teaches the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold (Column 3 Line 1-

5). It would have been obvious to one skilled in the art to modify Verma in view of Das to have the foreign agent detect the mobile unit by determining the signal strength as taught by Kim in order to carry out hard handoff (Column 3 Line 1).

Regarding to claim 2, Verma teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit (Column 2 Line 64).

Regarding to claim 3, Das teaches the foreign agent 140 is further operable to receive the multicast packets from the packet network, to extract the IP packets from the multicast packets, and to communicate the IP packets to the mobile unit [0022].

Regarding to claim 5, Das teaches the home agent 120 determines the multicast address by communicating a request including the IP address of the mobile unit to the mobility manager and receiving the multicast address from the mobility manager responsive to the request [0022].

Regarding to claim 6, 14, 22 and 25, Verma teaches a method for registering to receive packets comprising: determining a device identifier for a mobile unit (Column 2 Line 64), the mobile unit having an internet protocol (IP) address comprising a subnet identifier for a remote network (Column 2 Line 6–12). Verma, however, does not teach about multicasting. Das teaches about

multicasting. Das teaches communicating a request for a multicast address associated with the mobile unit, the request including the device identifier [0026]; receiving the multicast address [0023]; and registering for a multicast group identified by the multicast address [0027]. It would have been obvious to one skilled in the art to modify Verma to use multicasting as taught by Das in order to reduce handoff latency [0010]. Verma in view of Das, however, does not teach the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold. Kim teaches the foreign agent operable to detect the mobile unit by determining that a signal strength received from the mobile unit have exceed a threshold (Column 3 Line 1-5). It would have been obvious to one skilled in the art to modify Verma in view of Das to have the foreign agent detect the mobile unit by determining the signal strength as taught by Kim in order to carry out hard handoff (Column 3 Line 1).

Regarding to claim 7, 15, 23 and 26, Das teaches receiving multicast packets addressed to the multicast address, wherein the multicast packets contain information for communication to the mobile unit [0022].

Regarding to claim 8, 16 and 27, Das teaches the information in the multicast packets comprising IP packets addressed to the IP address for the mobile unit [0028].

Regarding to claim 9, 17 and 28, Verma teaches the information in the multicast packets comprises voice information (Column 8 Line 25–39).

Regarding to claim 10, 18 and 29, Das teaches the multicast group comprises a plurality of foreign agents 140 each receiving multicast packets containing information for communication to the mobile unit [0023] (Figure 1).

Regarding to claim 11, 19 and 30, Verma teaches each of the foreign agents receiving the multicast packets communicates the information from the multicast packets to facilitate handoff of the mobile unit [0030].

Regarding to claim 12, 20 and 31, Verma teaches the device identifier as at least one of a mobile identification number (MIN) for the mobile unit and an equipment serial number (ESN) for the mobile unit (Column 2 Line 64)..

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the mobile communication in general.

U.S. Patent 5,396,541 to Farwell et al.

U.S. Patent 5,319,795 to Hamabe et al.

U.S. Patent 5,164,958 to Omura

U.S. Patent 5,509,035 to Teidemann Jr. et al.


U.S. Patent 5,175,867 to Wejke et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.H.
Clemence Han
Examiner
Art Unit 2665


HUY D. VU
SUPERVISORY PATENT EXAMINER
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